



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

**75 Hawthorne Street**

**San Francisco, CA 94105-3901**

Mr. Tom Porta, P.E.  
Deputy Administrator  
Nevada Division of Environmental Protection  
901 S. Stewart Street, Suite 4001  
Carson City, NV 89701

Dear Mr. Porta:


Thank you for submitting Nevada's 2006 Section 303(d) list of water quality limited water bodies. The final submittal and supporting documentation were received on February 17, 2009. EPA has conducted a complete review of the final submittal and has determined that Nevada's 2006 list of water quality limited segments (WQLSs) still requiring TMDLs meets the requirements of Section 303(d) of the Clean Water Act and EPA's implementing regulations. Therefore, EPA hereby approves Nevada's 2006 Section 303(d) list. The statutory and regulatory requirements, and a summary of EPA's review of Nevada's compliance with each requirement, are described in the enclosure.

Nevada's 2006 303(d) list includes 415 WQLS. One hundred and sixty one pollutant water body combinations were delisted and 112 WQLS were added to the 303(d) list. The listings were based on an assessment methodology described in the submittal. Priority rankings for all listed waters are established as required by Section 303(d) and its implementing regulations (40 CFR 130.7). In the submittal, Nevada has targeted Lake Tahoe as high priority for TMDL completion; all other impaired waters are low priority. Pursuant to 40 CFR 130.7(d)(1), EPA would like to continue discussions on Nevada's TMDL targeting and scheduling commitments and reach agreement with the State on a TMDL development schedule that provides for regular and timely completion of TMDLs for listed waters.

The public participation process sponsored by Nevada Division of Environmental Protection included solicitation of public comments via e-mail broadcasts and a public notice published February 8, 2008. A 30-day comment period ended on March 7, 2008. Public comments were evaluated, the report revised, and a Response to Comments document prepared. The State's public participation activities were consistent with federal requirements.

Thank you for your efforts to produce the Section 303(d) water body list for the 2006 listing cycle. If you have questions concerning EPA's decision, feel free to call me at (415) 972-3572 or contact Stephanie Wilson at (775) 885-6190.

Sincerely yours,

 27 February 2009  
Alexis Strauss  
Director, Water Division

Enclosure

## **Enclosure 1: Review of Nevada's 2006 Section 303(d) Water Body List**

*Enclosure to letter from Alexis Strauss, EPA Region 9 to Tom Porta, NDEP*

Date of Transmittal Letter from State: February 17, 2009

Date of Receipt by EPA: February 17, 2009

### **Purpose**

The purpose of this review document is to describe the rationale for EPA's approval of Nevada's 2006 Section 303(d) list of water quality limited segments (WQLSs) requiring TMDLs. The following sections identify those key elements to be included in the list submittal based on the Clean Water Act and EPA regulations (see 40 CFR Section 130.7). EPA reviewed the methodology used by the State in developing the 303(d) list and the State's description of the data and information it considered. EPA's review of Nevada's 303(d) list is based on EPA's analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

### **Statutory and Regulatory Background**

#### **Identification of WQLSs for Inclusion on Section 303(d) List**

Section 303(d)(1) of the Act directs States to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standards, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that States do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by federal, State or local authority, and (3) other pollution control requirements required by State, local, or federal authority. See 40 CFR 130.7(b)(1).

#### **Consideration of Existing and Readily Available Water Quality-Related Data and Information**

In developing Section 303(d) lists, States are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the State's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired

or threatened in any Section 319 nonpoint source assessment submitted to EPA. See 40 CFR 130.7(b)(5). In addition to these minimum categories, States are required to consider any other data and information that is existing and readily available. EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available. See Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, 1991, Appendix C ("EPA's 1991 Guidance"). While States are required to evaluate all existing and readily available water quality-related data and information, States may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring States to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR 130.7(b)(6) require States to include as part of their submittals to EPA, documentation to support decisions to rely or not rely on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.

#### Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that States establish a priority ranking for listed waters. The regulations at 40 CFR 130.7(b)(4) require States to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, States must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and State or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance. EPA does not take action to approve or disapprove state priority rankings.

#### Analysis of Nevada's Submittal

##### Identification of Waters and Consideration of Existing and Readily Available Water Quality-Related Data and Information

EPA has reviewed the State's submittal, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR 130.7. Because Nevada's submittal includes all waters that meet Section 303(d) listing requirements, EPA is approving Nevada's 303(d) list. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

Nevada conducted a basic assessment of water quality conditions based principally on a review of data from the State's ambient water quality monitoring program and application of a modified assessment methodology first applied to the 2002 Section 303(d) listing process. The methodology is described in detail in the listing submittal. The State's general approach was to assess waters for which sufficient data and information were available to do so, and to continue listing waters contained on the 2004 Section 303(d) list absent new data and information to support a careful assessment of their current condition. This approach is generally consistent with federal listing requirements. EPA supports the State's approach of retaining on the list all the previously listed waters until new data and information are available to support a change in their assessment.

For the 2006 list, Nevada assembled and considered existing and readily available data and information sources, including each of the sources identified in 40 CFR 130.7(b)(5) except one report as discussed below (Submittal, pp. 9). The State reviewed data and information during the five year period October 1, 2000 and September 30, 2005. Ambient water quality data collected through the State's statewide monitoring program was the primary data source for development of the 2006 list. The State solicited data and information from the public prior to developing its listing recommendations and provided extensive opportunities for the public to comment on its listing recommendations. Nevada evaluated all data submitted by outside entities to ensure that the data was collected according to basic quality assurance/quality control procedures. The State provided a summary of the data submitted by other agencies/individuals (Submittal, Attachment 4). The State did not revisit the Section 319 Assessment Report as part of the 2006 Section 303(d) list analysis. As described in EPA's approval of the 1998 Section 303(d) lists, the results of Nevada's most recent Section 319 assessment were considered in the development of that list. The Section 319 assessment has not been updated since 1998, and the State retained waters listed in 1998 on the 2006 Section 303(d) list absent more recent data and information. Therefore, the State considered the results of the now-dated Section 319 assessment in its 2006 Section 303(d) listing assessment.

The listing methodology employed by Nevada for 2006 describes a set of decision criteria that were applied (Submittal, pp11-16). In general, waters were listed for conventional pollutants in cases where at least 10 samples were available and more than 10% of available samples exceeded the applicable water quality standards during the past 5 years. In cases where there were 10 or fewer data points and 2 or more exceedances of a beneficial use standard, the waters were listed. This assessment approach is appropriate for water quality standards that do not express specific information regarding allowable exceedances of duration and frequency. The State methodology dictates that for water quality parameters defined as a maximum annual average or annual median concentration, a waterbody was listed if the annual average or median was exceeded at least once during the five-year listing period. For some waters that did not meet the 10 sample/10% exceedance test or the <10 sample/2 or more exceedance test, the State also applied a weight of evidence approach in examining individual waters and pollutants. The State considered the type of pollutant involved, the water body and watershed characteristics, the magnitude and distribution of exceedances, and other information about the water body including land use characteristics. For example, the State also listed waters for which a fishing, drinking, or swimming advisory was in effect at any time during the prior 5 years. EPA still has concerns that the provision to require more than 10% of available samples to exceed a standard

may be inconsistent with State standards expressed as single values not to be exceeded. Nevada standards do not provide a basis for a less than strict reading of these not-to-be exceeded water quality standards. However, Nevada's 303(d) methodology explains that use of the 10% rule is intended to account for measurement error and the potential that small data sets may not be fully representative of receiving water conditions.

EPA has reviewed Nevada's description of the data and information it considered, the methodology for identifying waters, the State's responsiveness summary, and the supplemental data and information. EPA concludes that the State properly assembled and evaluated all existing and readily available data. While the State apparently did not consider data from EPA's National Lake Fish Tissue Study collected between 2000 and 2003, EPA determined for the 2004 303(d) list that the fish tissue data from Chimney Reservoir supported a conclusion that this water is not meeting water quality standards for mercury. EPA added the listing for Chimney Reservoir to the State's 2004 303(d) list. The State included the listing for Chimney Reservoir on the 2006 303(d) list as provided by their approach of retaining on the list all previously listed waters until new data and information are available to support a change in their assessment. The National Lake Fish Tissue Study has not been updated since the 2000-2003 study, and the State retained waters listed in 2004 Section 303(d) list absent more recent data and information. Therefore, the State considered the results of the EPA National Lake Fish Tissue Study.

EPA concludes the State's decisions to list the waters identified in Attachment 1 of its listing submittal are consistent with federal listing requirements. Although EPA reviewed Nevada's listing methodology as part of our review of the listing submittal, EPA's approval of the State's listing decisions should not be construed as concurrence with or approval of the listing methodology. EPA does not take action on the listing methodology itself under 40 CFR 130.7. Rather, EPA considers the State methodology as part of its review, to the extent that the methodology is consistent with the State's water quality standards and sound science. EPA's decision to approve Nevada's listing decision is based on EPA's review of the data and information submitted and compiled concerning individual waters and the State's evaluation of those waters. Although EPA was concerned about some aspects of the State's listing methodology, those concerns did not impact our final listing decision.

EPA reviewed the changes between the State's 2004 and 2006 methodology to determine if previous concerns were adequately addressed. In EPA's review of the State's 2004 303(d) list, EPA expressed concern that the State was not following the approach for acute water quality standards for toxic pollutants recommended in EPA's 1997 and 2002 assessment guidance documents. These federal guidance documents indicate that waters should generally be considered water quality limited if they exceed acute water quality standards for toxic pollutants more than once in any three year period. For the 2006 303(d) list, the State modified its assessment methodology to list waters if there were two or more exceedances in any three year period. The State's specific listing decisions are consistent with both the State "Standards for toxic materials applicable to designated waters" (NAC 445A.144) and federal assessment guidance for acute toxic pollutants.

In general, in its 2004 303(d) list, Nevada did not list waters that appeared to exceed chronic standards for toxic pollutants suggesting that using grab samples to assess chronic standards may not be representative of conditions during a 4 day period. For the 2006 303(d) list, the State methodology suggests that due to resource constraints, grab sample data are all that exist for many water bodies and are therefore the basis for some of the 303(d) listings. EPA's 1997 and 2006 assessment guidance documents generally recommend that waters should be listed if they exceed chronic standards for toxic pollutant effects on aquatic life more than once in any three year period. The State's 2006 303(d) listing methodology states that "For toxic parameters with acute and chronic criteria, waters were listed if there were two or more exceedances in any three year block." The State's specific listing decisions are consistent with both the State listing methodology and federal assessment guidance for listing toxic parameters based on exceedance frequencies for chronic criteria. In addition, the State retained those listings added by EPA for the 2004 303(d) list on the 2006 303(d) list absent more recent data and information.

#### Nonpoint Source Impaired Waters

The State properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In *Pronsolino v. Marcus*, the District Court for the Northern District of California held that Section 303(d) of the Clean Water Act (CWA) authorizes EPA to identify and establish total maximum daily loads (TMDLs) for waters impaired by nonpoint sources. *Pronsolino et al. v. Marcus et al.*, 91 F.Supp.2d 1337, 1347 (N.D.Ca.2000), *aff'd* *Pronsolino v. Nastri*, 291 F.3d 1123 (9<sup>th</sup> Cir. 2004). See also EPA's 1991 Guidance and National Clarifying Guidance for 1998 Section 303(d) Lists, Aug. 27, 1997.

#### Priority Ranking and Targeting

EPA reviewed the State's priority ranking of listed waters for TMDL development. Priority rankings for all listed waters are established as required by Section 303(d) and its implementing regulations. Priorities are established based on the Bureau of Water Quality Planning's Long Range Plan which outlines activities that will be conducted through the major programs. According to the Long Range Plan, the State will develop effective TMDLs which address real problems (based upon appropriate beneficial uses and numeric criteria) and where needed to support local efforts to address the problems. The State intends to conduct in-depth assessments of the causes of impairments and evaluate the applicable water quality standards prior to developing TMDLs. With the exception of Lake Tahoe, all TMDLs were designated as low priority for development over the next two years. Pursuant to 40 CFR 130.7(d)(1), EPA would like to continue discussions of Nevada's TMDL targeting and scheduling commitments with the State and reach agreement with the State on a TMDL development schedule.

### Administrative Record Supporting This Action

In support of this decision to approve the State's listing decisions, EPA carefully reviewed the materials submitted by the State with its 303(d) listing decision, including a large number of data summaries that reported data for waters for toxic and conventional pollutants. The administrative record supporting EPA's decision is comprised of the materials submitted by the State, copies of Section 303(d), associated federal regulations, and EPA guidance concerning preparation of Section 303(d) lists, and this decision letter and supporting report. EPA determined that the materials provided by the State with its submittal provided sufficient documentation to support our analysis of the State's listing decisions. We are aware that the State compiled and considered additional materials (e.g., raw data and water quality analysis reports) as part of its list development process that were not included in the materials submitted to EPA. EPA did not consider these additional materials as part of its review of the listing submittal. It was unnecessary for EPA to consider all the materials considered by the State in order to determine that, based on the materials submitted to EPA by the State, the State complied with the applicable federal listing requirements. Moreover, federal regulations do not require the State to submit all data and information considered as part of the listing submittal.



## References

The following list of documents was used directly or indirectly as a basis for EPA's review of the State's 303(d) water body list. This list is not meant to be an exhaustive list of all records reviewed, but to identify the primary documents the Region relied upon in making its decision to approve the State's 2006 303(d) list.

Nevada's 2006 Public Comment Draft List with attachments, February 8, 2008

Nevada's 2006 Second Draft List Submittal with attachments, June 20, 2008

Nevada's 2006 List Final Submittal with attachments, February 17, 2009

Nevada's supplemental data submittal, October 20, 2008

Letter from EPA to NDEP, March 6, 2008

Nevada Water Quality Standards, N.A.C. 445A.119 et seq.

December 28, 1978 Federal Register Notice, *Total Maximum Daily Loads Under Clean Water Act*, finalizing EPA's identification of pollutants suitable for TMDL calculations, 43 Fed. Reg. 60662.

January 11, 1985 Federal Register Notice, *40 CFR Parts 35 and 130, Water Quality Planning and Management: Final Rule*, 50 Fed. Reg. 1774

40 CFR Part 130 Water Quality Planning and Management

April 1991, "Guidance for Water Quality-Based Decisions: The TMDL Process," EPA 440/4-91-001.

August 27, 1997 memorandum from Robert H. Wayland III, Director, Office of Wetlands, Oceans and Watershed, Office of Water, EPA Headquarters, to Water Division Directors, Regions I-X, and Directors, Great Water Body Programs, and Water Quality Branch Chiefs, Regions I-X, regarding "National Clarifying Guidance For 1998 State and Territory Section 303(d) Listing Decisions."

September, 1997 guidance from Office of Water, Headquarters, US EPA regarding Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement, EPA-841-B-97-002B

Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, EPA Office of Water, July 29, 2005

